

Mr. Richard H. Rocha
Missouri Chamber of Commerce and Industry
428 East Capital
P.O. Box 149
Jefferson City, MO 65102-0149

RE: Comments regarding Regulatory Impact Report (RIR) for 10 CSR 20-7.031, Water Quality Standards (WQS)

Dear Mr. Rocha:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the MO Clean Water Commission. After reviewing your comments, staff offer the following responses. Your comments are summarized before each response. The Chamber's comments relate solely to the whole body contact recreational (WBCR) designation.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

Comment #1: The rules and standards must be based on scientifically sound, transparent, and peer-reviewed science.

Response #1: The department has the responsibility to protect the citizens and water resources of the state. Also, the department must adopt standards that are fundamentally equivalent to the federal Clean Water Act (CWA) or risk promulgation by U.S. Environmental Protection Agency (USEPA). The federal CWA states that waters should be "fishable/swimmable." Therefore, the draft rules establish WBCR designation for all classified waters. No scientific justification can be provided for the designation. For the revision establishing a new indicator bacteria criterion, sound scientific justification can be found in the referenced criteria document developed by USEPA¹.

¹ United States Environmental Protection Agency (1986). Ambient Water Quality Criteria for Bacteria—1986. EPA 440-5-84-002. <http://www.epa.gov/waterscience/beaches/1986crit.pdf>

Comment #2: Reliable cost-benefit analyses of several alternatives should be used so that the least costly, most cost-effective, or least burdensome alternative can be identified.

Response #2: With regards to cost-benefit analysis, it is difficult to establish a price on health. Staff is not aware of the current risk of waterborne diseases or toxic concentrations for the majority of the waters of the state. Data are limited, especially bacterial data on waters not currently designated for whole body contact recreation (WBCR). We are not doing a full-fledged economic analysis. We are only evaluating alternatives using best professional judgement and some associated cost estimates. The Department's simple analysis addresses some items whose values are hard to express into dollars and cents such as health and safety, aesthetic value of the environment, and the lost opportunity of income from businesses associated with unpolluted environment.

Comment #3: The RIR does not identify any tangible benefits to justify the enormous costs of WBCR designation.

Response #3: See response #2.

Comment #4: The RIR does not identify and consider a reasonable number of regulatory alternatives.

Response #4: Staff regrets that one specific alternative was omitted. As stated in the stakeholder minutes attached to the RIR as appendices, a phased approach to recreational use designations was discussed. Although this alternative was considered, the federal CWA requires the designation for WBCR. Staff will include the discussions of this alternative. During consideration of this alternative, the Departments of Natural Resources and Agriculture worked on a memorandum of understanding (MOU). Though the MOU was never finalized, the Department of Agriculture had preliminarily agreed to help the Department of Natural Resources in an advisory capacity for assessing the suitability of classified water bodies in agricultural areas for whole body contact recreation designation. Another alternative that was discussed is tiered recreational uses. The Clean Water Commission recommended this approach, which is currently in the draft WQS.

Comment #5: The statute does not authorize the MDNR to shift their responsibility of identifying alternatives to the public.

Response #5: The department does not intend to shift our responsibility of identifying alternatives to the public. See response #4. Staff believes that all alternatives have been explored, but will consider any new alternatives private citizens or stakeholders might suggest.

Mr. Richard H. Rocha
Page Three

Comment #6: The RIR should show that the department has considered a reasonable number of regulatory alternatives, including the alternative of not regulating.

Response #6: An alternative of not regulating would most likely result in promulgation by USEPA. For instance, USEPA promulgated primary contact recreation (similar to WBCR) in Kansas. This alternative was discussed in the Introduction of the RIR. The department's obligation is to regulate to ensure compliance with the water quality standards.

Comment #7: The RIR does not clearly identify EPA references used, particularly where the RIR directs the reader to "EPA's administrative record" to obtain the risk data (sections 10, 11, & 12). Also, specific sections and/or chapters are not identified.

Response #7: The administrative record cited in the RIR consists of all references included in USEPA's criteria development. Also criteria information and associated references can be found on USEPA's web site. For example, USEPA bacteria information can be found at <<http://www.epa.gov/waterscience/humanhealth/microbial/microbial.html>>, and general standards information can be found at <<http://www.epa.gov/waterscience/standards/>>. Of the USEPA reference documents listed in Appendix A, the entire document is relative, not specific sections and/or chapters. Although it requires a lot of reading, the references provide great insight into specific sections of the draft rules, such as ammonia and bacteria.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPCSD
Ms. Pam Bax, Deputy Director, WPCSD
MO Clean Water Commission

Ms. Leslie Holloway
Missouri Farm Bureau Federation
P.O. Box 658
701 S. Country Club Drive
Jefferson City, MO 65102

RE: Comments regarding Regulatory Impact Report (RIR) for 10 CSR 20-7.015, Effluent Regulations (ER) and 10 CSR 20-7.031, Water Quality Standards (WQS)

Dear Ms. Holloway:

Thank you for your letter dated December 15, 2004, addressed to Ms. Marlene Kirchner, secretary of the MO Clean Water Commission. After reviewing your comments, staff offer the following responses. Your comments are summarized before each response.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

Comment #1: Hundreds of private and public entities in addition to the 911 facilities mentioned in the RIR could be affected by the proposed amendments. Potential costs have been grossly underestimated.

Response #1: The Department focused on identifying permitted entities that would be significantly impacted by the proposed rule and for which the cost could be reasonably estimated. While it might be true that all citizens of Missouri could benefit and/or feel an impact from the proposed rule, the Department does not have information available to reasonably estimate those effects.

Comment #2: Comparison of costs and benefits of action to inaction (Section 6) in both RIRs is entirely inadequate given the magnitude of the potential costs to public and private entities.

Response #2: It is difficult to compare the cost associated with new requirements for treatment to the benefits that the treatment will afford to environmental quality and good public health. The Department does not know of a way to quantify the worth of the public's health and the overall environmental quality that would result from the proposed rule. Therefore, a reasonable comparison can not be made between the cost of treatment and the worth of the increased environmental protection.

Comment #3: The Effluent Regulations revisions are not entirely administrative and should provide information on peer-reviewed or other scientific data.

Response #3: The draft Effluent Regulations revisions are in response to changes that occurred in the draft WQS or to correct past typographic errors. The change in 10 CSR 20-7.015(4)(B)5 regarding dechlorination in losing streams was at the suggestion of the total residual chlorine workgroup. Revisions to the Outstanding Resource Waters occurred to make the Effluent Regulations consistent with the existing anti-degradation policy in the WQS. Effluent regulations are the practical application of water quality standards. Therefore, peer reviewed scientific data for WQS are also valid for Effluent Regulations.

The following WQS revision:	resulted in a change to or addition of	The following ER revision:
1. Whole Body Contact Recreation designation		1. An implementation schedule for compliance with disinfection requirements.
2. Outstanding National and State Resource Water language		2. Special effluent limitation as required in 10 CSR 20-7.015(6) to be consistent with Antidegradation policy.

Comment #4: Section 5 that deals with the effects on state revenue should note some private entities have received federal grants to conduct UAAs on a number of classified water bodies.

Response #4: USEPA awarded two grants to two separate contractors to develop UAAs on streams receiving discharge from 109 WWTFs. These facilities met the department's priority, which consisted of facilities with small design flows discharging to Class C streams. The list includes municipalities, schools, subdivisions, and industries that are public, private, for-profit, and non-profit and would not have the resources for potential upgrades, UAAs, or scientific studies. The specific work for the grantees was finalized after the publication of the RIR. Therefore, the department did not rely on their benefit until it was known the grants were awarded. The costs currently in the RIR involve the department conducting potential UAAs, although this is not a regulatory obligation. UAAs could be completed by the department or private entities.

Ms. Leslie Holloway
Page Three

Comment #5: The department should clarify that the potential for additional waters to be placed on the 303(d) list applies not only to costs to the state but private entities as well.

Response #5: The comment is accurate. Private entities could also incur costs as the result of a total maximum daily load (TMDL).

Comment #6: Section 8, alternative methods, should include mention of the draft memorandum of understanding (MOU) between the Department of Natural Resources and the Department of Agriculture.

Response #6: Though the MOU was never finalized, the Department of Agriculture had preliminarily agreed to help the Department of Natural Resources in an advisory capacity for assessing the suitability of classified water bodies in agricultural areas for whole body contact recreation designation. The department intends to finalize an agreement with the Department of Agriculture in the future. The comment is appropriate.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

Mr. Robert J. Brundage
Newman, Comley, & Ruth, P.C.
601 Monroe Street, Suite 301
P.O. Box 537
Jefferson City, MO 65102-0537

RE: Comments regarding Regulatory Impact Report (RIR) for 10 CSR 20-7.015, Effluent Regulations (ER) and 10 CSR 20-7.031, Water Quality Standards (WQS)

Dear Mr. Brundage:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the Clean Water Commission. After reviewing your comments, staff offers the following responses. Your comments are summarized before each response. Enclosed is a copy of the response letter to the Missouri Chamber of Commerce and Industry's comments, which you incorporated by reference in your letter.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

Comment #1: The department submits no evidence or alternatives to support the claim that mixing zones are not protective in Class C streams and streams with a 7Q10 of 0.1 cfs or less.

Response #1: U.S. Environmental Protection Agency (USEPA) suggested this revision. The retraction of the allowance for a mixing zone only impacts water quality based effluent limits (WQBEL) that are either derived from a waste load allocation (WLA) study or a total maximum daily load (TMDL). In addition, for a facility achieving WQBEL, removing the mixing zone allowance would not necessitate an upgrade. It might, however require improved operation and maintenance. Class C streams, by definition, do not flow during dry periods, but they may have pools that support aquatic life. Streams with a 7Q10 flow of 0.1 cfs or less barely have moving water. In both instances, allowing a mixing zone adversely effects aquatic life because there is no water for pollutants to mix with or flow to transport pollutants downstream. This revision is based on the fact that there is no flow in the stream to provide dilution to the effluent before it is degraded below the chronic criterion.

Comment #2: The department does not make a distinction between ditches with no flow and stream with a 7Q10 of 0.1 cfs or less.

Response #2: Distinctions between waters that are ditches or an Ozark stream are not appropriate in determining flow-based classification (i.e. Class C, Class P, or unclassified). Mixing is considered only if significant amount of (supposedly unpolluted) water exists in the receiving stream for the effluent to mix with. Therefore, it is a matter of volume and not of the water body category.

Comment #3: Alternative approaches to eliminating the mixing zones in Class C streams and streams with a 7Q10 of 0.1 cfs or less include (1) identifying Class C streams that have not attained their beneficial uses and correct on an individual basis and/or (2) introducing a new beneficial use for effluent dominated streams.

Response #3: Staff appreciates the suggestions of alternatives to the draft WQS, though the RIR is not the appropriate venue for such comments. The department will hold your comment for the public comment period after the regulations are published in the *Missouri Register*.

Comment #4: The MDNR proposal requires environmental protections that are overprotective and impose a severe economic burden.

Response #4: Missouri, through the department, has an obligation to adopt standards that are fundamentally equivalent to the federal Clean Water Act. For many of the revisions, such as ammonia and bacteria, sound scientific justification can be found in the appropriate referenced criteria documents developed by U.S. Environmental Protection Agency (USEPA). With regards to cost-benefit analysis, it is difficult to establish a price on health and environment. Staff provided as much factual information as is thought to be currently possible on the water resources in the state of Missouri.

Comment #5: The RIR did not include an economic analysis of eliminating the mixing zone for small streams.

Response #5: See response #1. .

Comment #6: The draft regulations were not included in the original publication of the RIR.

Response #6: Only one publication of the RIR exists. Copies of the draft regulations were made available upon request, as noted on the department's web page and in the newspaper announcement.

Comment #7: The department proposes to eventually eliminate the bacterial “high flow exemption.” The department proposes no alternatives, although several are discussed in the appendices.

Response #7: The department has no plans to eliminate the bacterial high flow exemption. Regarding alternatives, your comment is appropriate. Several alternatives discussed in the appendices as part of stakeholder meeting minutes were mistakenly not included in the RIR as alternatives. These alternatives will be added to the appropriate section(s) of the RIR.

Comment #8: An alternative the MDNR should consider is a high flow exemption any time that the stream exceeds 125% of normal flow or alternatively, one foot above the normal high water mark.

Response #8: Staff appreciates the suggestions of alternatives to the draft WQS, the department will address this comment during the public comment period after the regulations are published in the *Missouri Register*.

Comment #9: When discussing countervailing risks, there is no discussion of the adverse effects of by-products of dechlorination.

Response #9: The level of chemicals used for dechlorination would not produce byproducts at concentrations harmful to aquatic life or human health. One of the chemicals used in dechlorination is sodium thiosulfate. According to the material safety data sheet (MSDS) for sodium thiosulfate, no known carcinogenic effect is known or anticipated. Also, no information can be found on the environmental fate or toxicity.

Comment #10: The department did not consider any other regulatory approaches nor were alternative methods considered.

Response #10: As stated in the stakeholder minutes attached to the RIR as appendices, a phased approach to recreational use designations along with a tiered approach for aquatic life designations were discussed. Although a phased approach to recreational use designation was considered, the federal CWA requires the designation for WBCR. During consideration of this alternative, the Departments of Natural Resources and Agriculture worked on a memorandum of understanding (MOU). Though the MOU was never finalized, the Department of Agriculture had preliminarily agreed to help the Department of Natural Resources in an advisory capacity for assessing the suitability of classified water bodies in agricultural areas for whole body contact recreation designation. Staff will include the discussions of this alternative in the RIR. Tiered aquatic life designations were not included in this rulemaking, but will be investigated during the next rulemaking. Another alternative that was discussed is tiered recreational uses. The Clean Water Commission recommended this approach, which is currently in the draft WQS.

Mr. Robert J. Brundage
Page Four

Comment #11: Why did staff not further consider the use of a dissolved oxygen criterion of 3.0 mg/L for unclassified streams as stated on page 30 of the April 17, 2001 stakeholder meeting minutes? This alternative should be included in the RIR.

Response #11: Due to the numerous revisions the department was required to address, the adoption of the 1986 dissolved oxygen criteria was not included in this rulemaking. The department proposes to address the dissolved oxygen criteria during the next rulemaking in association with the revision of the tiered aquatic life designations.

Comment #12: The language added that provides for the development and use of anti-degradation implementation procedures is unnecessary.

Response #12: These procedures are required by USEPA and must be developed to fully comply with the 40 CFR 131.12(a). The language was added to inform entities and the general public that these procedures would be developed. Staff appreciates the suggestions of alternatives to the draft WQS. The department will address this comment during the public comment period after the regulations are published in the *Missouri Register*.

Comment #13: Change the title of boating and canoeing to a title that more accurately reflects the definition, such as secondary recreational contact.

Response #13: Staff appreciates the suggestions of alternatives to the draft WQS, the department will address this comment during the public comment period after the regulations are published in the *Missouri Register*.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

Mr. David Cavender, P.E., DEE
Scott Consulting Engineers, P.C.
550 St. Louis Road
Springfield, MO 65806

RE: Comments regarding Regulatory Impact Report (RIR) for 10 CSR 20-7.015, Effluent Regulations (ER) and 10 CSR 20-7.031, Water Quality Standards (WQS)

Dear Mr. Cavender:

Thank you for your letter dated December 13, 2004, addressed to Ms. Marlene Kirchner, secretary of the Clean Water Commission. After reviewing your comments, staff offer the following responses. Your comments are summarized before each response.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

Comment #1: The RIRs present little justification for the anticipated changes. Sound scientific justification is needed and also a cost versus benefit analysis.

Response #1: Missouri, through the department, has an obligation to adopt standards that are fundamentally equivalent to the federal Clean Water Act. For many of the revisions, such as ammonia and bacteria, sound scientific justification can be found in the appropriate referenced criteria documents developed by U.S. Environmental Protection Agency (USEPA). With regards to cost-benefit analysis, it is difficult to establish a price on health. Staff is not aware of the current risk of waterborne diseases or toxic concentrations for the majority of the waters of the state. Data are limited, especially bacterial data on waters not currently designated for whole body contact recreation (WBCR). Staff provided as much information as is thought to be currently possible on the water resources in the state of Missouri.

Mr. David Cavender
Page Two

Comment #2: The alternatives to WBCR designation shift the burden of proof for the need for disinfection to the regulated community.

Response #2: The department has the responsibility to protect the citizens and water resources of the state through delegation of Clean Water Act (CWA) responsibilities by USEPA. Also, the department must adopt standards that are fundamentally equivalent to the federal CWA or risk promulgation by USEPA. The federal CWA states that waters should be “fishable/swimmable.” Therefore, the draft rules establish WBCR designation for all classified waters. If an entity wishes to receive an exemption or altered standard, they will need to prove that point. The department does not have enough resources, money or staff, to efficiently determine alternatives for all entities in a reasonable amount of time.

Comment #3: The high flow exemption proposal sets the conditions for exempt discharge far too high. The need for such an exemption is economic. The exemption for these types of discharges needs to be for a two year, twenty-four (24) hour storm.

Response #3: If the need for an exemption from disinfection exists because of economics, a UAA may be the more appropriate avenue for exemption. Factor 6 of the UAA document states a WBCR designation may be removed if substantial and widespread social and economic impacts exist. High flow exemption is a “part-time” or event-driven condition while UAA is a full-time waiver that is justified by one (or more) of 6 conditions during every review of WQS. Staff appreciates the suggestions of alternatives to the draft WQS. The department will address this comment during the public comment period after the regulations are published in the *Missouri Register*.

Again, thank you for reviewing and commenting on the Effluent Regulation’s Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

Mr. John R. Lodderhose, P.E., Assistant Director
Office of Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-2913

RE: Comments regarding Regulatory Impact Report for 10 CSR 20-7.031, Water Quality Standards and 10 CSR 20-7.015, Effluent Regulations

Dear Mr. Lodderhose:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the Clean Water Commission. The Clean Water Commission has asked staff to respond to your comments on the Regulatory Impact Reports for 10 CSR 20-7.031, Water Quality Standards and 10 CSR 20-7.015, Effluent Regulations.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

The comments you provided were identical to the comments provided by the Urban Areas Coalition. Therefore, staff have prepared responses in a letter to the Urban Areas Coalition and attached this letter as a response to your comments.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Mr. John R. Lodderhose
Page Two

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

«FirstName»
«Company»
«Address1»
«Address2»
«City», «State» «PostalCode»

RE: Comments regarding Regulatory Impact Report for 10 CSR 20-7.031, Water Quality Standards and 10 CSR 20-7.015, Effluent Regulations

Dear Sir or Madam:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the MO Clean Water Commission. The Clean Water Commission has asked staff to respond to your comments on the Regulatory Impact Reports for 10 CSR 20-7.031, Water Quality Standards and 10 CSR 20-7.015, Effluent Regulations.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal Clean Water Act. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

The comments you provided were identical to the comments provided by the Urban Areas Coalition. Therefore, staff have prepared responses in a letter to the Urban Areas Coalition and enclosed this letter as a response to your comments.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

Ms. Susan M. Myers
Urban Areas Coalition
2350 Market Street
St. Louis, MO 63103

RE: Comments regarding Regulatory Impact Report for 10 CSR 20-7.015, Effluent Regulations

Dear Ms. Myers:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the MO Clean Water Commission. After reviewing your comments, staff offers the following responses. Your comments are summarized before each response.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

1. Does the rulemaking adopt rules from the US Environmental Protection Agency or rules from other applicable federal agencies without variance?

Comment #1: The department should clarify that federal rules adopted without variance do not require a RIR.

Response #1: While the clarification would be accurate with respect to how the statute reads, the department feels that the clarification might confuse the persons who read the RIR into thinking that adoption "without variance" of federal standards was intended. Some of the revisions within this rulemaking serve to make the Water Quality Standards (WQS) in 10 CSR 20-7.031 and Effluent Regulations (ER) in 10 CSR 20-7.015 consistent or functionally equivalent with the federal Clean Water Act. However, because exact wording from the federal rules was not adopted in the department's draft rule, several revisions are not considered to be written "without variance" from federal rules.

2. Report on peer-reviewed scientific data used to commence the rulemaking process.

Comment #2: No supporting information related to financial capabilities or assessment of required timeframe for design, permitting, and construction of the impacted entities has been provided to justify the compliance schedules.

Response #2: The department cannot reasonably determine the financial capabilities of a given entity. Also, the department does not maintain information related to the life of a facility and the requirements for design and construction due to a potential upgrade. The basis for the timeframe came from 10 CSR 20-7.031(10), which allows no more than three years for an entity to comply with new permit limits.

3. Description of persons who will most likely be affected by the proposed rule, including persons that will bear the costs of the proposed rule and person that will benefit from the proposed rule.

Comment #3: The report should state that any person or entity served by a wastewater treatment facility (WWTF), municipal separate storm sewer system (MS4), permitted discharge, or storm water runoff may be affected by this rule and bear costs.

Response #3: Individual citizens and certain entities were not addressed due to their indirect association with the water quality standards and effluent regulations. The department cannot speculate as to the extent of indirect costs, such as sewer rate increases. The direct costs to WWTFs were already considered in the cost of rulemaking. The cost to control agriculture runoff associated with bacteria loading, if any, was not included in this RIR. Many agricultural activities are not required to have a permit, but are required, as with any citizen or entity, to comply with the Missouri clean water law and corresponding WQS.

4. Description of the environmental and economic costs and benefits of the proposed rule.

Comment #4: The Economic Costs section does not include sufficient detail.

Response #4: Unit rate assumptions can be found in the revised Water Quality Standards RIR, Appendix D. The financial and life cycle status of a wastewater treatment facility (WWTF) is not available to the department in the majority of cases. It could be assumed that the average life span of a facility is 20 years. The cost of dechlorination was calculated for facilities that use chlorine. As stated in the RIR, it was assumed that most mechanical wastewater treatment plants would use UV disinfection. Therefore, it was also assumed that such facilities would not need additional filtration since their effluent would be of high quality. The department has included the assumptions used for determining the costs for dechlorination and additional filtration in the section.

Comment #5: The RIR should list all individual POTWs and related information.

Response #5: It was deemed inappropriate to list the specific facilities used in the calculation of disinfection costs. The list of these facilities is available for review as part of the WQS file held by the Water Protection Program. The assumptions used in determining the cost of disinfection was included in paragraph five of section four. Individual facilities were not separately investigated to determine specific costs for upgrading their plant. The queried

facilities were grouped according to their design flow and assumptions for those groups were used. As to the cost per facility, one can divide the total cost in each category by the number of facilities in that particular category. (For example, one hundred fourteen (114) facilities were categorized as public facilities with design flows less than 0.05 MGD and chosen for chlorination would have \$1,425,000 in installation costs. This averages about \$12,500 per facility in chlorination installation costs.)

Comment #6: In developing costs for disinfection, it is unclear what flows were used (e.g., design flow or peak flow).

Response #6: To make the cost estimations more manageable, the department categorized facilities into similar groups by design flow. Peak flows were calculated from the average flow using standard engineering factors. These calculations were used when determining the appropriate equipment needed for disinfection.

Comment #7: Costs for complying with the proposed rules for whole body contact recreation (WBCR) and bacteria criteria should also be estimated for wet weather discharges.

Response #7: The department does not have sufficient data to calculate the potential scope for wet weather discharges to exceed the proposed water quality standards for bacteria and, therefore, is unable to assign a reasonably accurate cost for treating wet weather discharges.

Comment #8: The cost of conducting Use Attainability Analyses (UAAs) should be included for all facilities that currently discharge to waters not designated for WBCR.

Response #8: The estimates provided for treatment assumed that all point source discharges of bacteria would receive disinfection. UAAs conducted on any of those receiving waters may result in an overall cost reduction if the UAA led to the removal of the WBCR use. The department chose to present the highest cost that can reasonably be expected as result of the proposed rule.

Comment #9: Costs for facilities that will have to test for both fecal coliform and *E. coli* should be included.

Response #9: Facilities will not be required to test for both fecal coliform and *E. coli*. The draft regulations state that either can be monitored for a period of three years. After that time, entities will be allowed to monitor only *E. coli*. The transitional phase was developed to allow entities and labs time to make the conversion to *E. coli*. Since *E. coli* requires a slightly different method of analysis, additional equipment may need to be acquired. The cost for conducting both analyses is not needed. The cost of analysis for fecal coliform and *E. coli* is essentially the same beyond the initial equipment.

Comment #10: Costs for facilities impacted by the elimination of the mixing zone allowance for Class C streams and stream with 7Q10 low flows of 0.1 cfs or less are not included.

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maximum daily load (TMDL). In addition, for a facility achieving WQBEL, removing the mixing zone allowance would not necessitate an upgrade. It might, however require improved operation and maintenance. Class C streams, by definition, do not flow during dry periods, but they may have pools that support aquatic life. Streams with a 7Q10 flow of 0.1 cfs or less barely have moving water. In both instances, allowing a mixing zone adversely effects aquatic life because there is no water to mix with or flow to transport pollutants downstream. This rationale is based on the fact that there is no flow in the stream to provide dilution to the effluent before it is degraded below the chronic criterion.

Comment #11: Costs have not been presented for facilities that may need to improve treatment to meet new metals and toxics criteria.

Response #11: The cost analysis for metals criteria for the protection of drinking water supplies (DWS) and aquatic life (AQL) is explained below.

The DWS total recoverable method consists of one less step in the sampling technique (sample filtration), making the cost of total recoverable testing less, though not significantly, than the dissolved method. For the protection of AQL, the revised criteria may be stricter or less strict than the old criteria depending on the type of water body receiving each individual discharge. The majority of criteria will be stricter.

An increase in treatment cost could occur depending on the quality of the effluent discharged and the level of treatment presently employed at each individual facility. The level of treatment at each facility ranges from minimal to advanced treatment. Information on each situation is insufficient to calculate how much alteration of treatment would be needed. The number of significant industrial users (SIGs) indirectly affected by the pretreatment program is unknown.

Due to the factors listed above, an assessment of the cost cannot be calculated or reasonably estimated at this time. The number of facilities potentially affected can be found in section 9 of the RIR (page 16-18). Please refer to section 9 of the RIR for additional details.

Comment #12: The RIR should be expanded to include other small businesses likely to be affected by the WQS rulemaking (e.g., small electroplating and metal finishing businesses).

Response #12: The examples given in the comment letter represent small businesses that would indirectly be affected by the rule changes. Small businesses with sanitary sewer connection may be subject to rate increases, or small electroplating and metal finishing businesses may need to add new equipment. This would incur as a result of additional requirements imposed by the WWTF. Since the department does not have control over connection costs or access to information such as particular sewer connections or pretreatment program participants that discharge to a WWTF, costs incurred by these small businesses are assumed to be, in part, calculated as part of the WWTF.

5. Probable cost to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenue.

Comment #13: The cost to the agency does not include consideration of the cost of developing and implementing TMDLs.

Response #13: As stated in section 5 of the RIR, these costs cannot be measured at this time since the number of waters potentially falling into this category is unknown. The amount of bacteria data and potential bacteria contributors, such as storm water runoff locations, that would lead to an impaired water assessment for the majority of waters is limited.

Comment #14: The cost to the agency does not include recalculation of effluent limits.

Response #14: This issue was indirectly addressed for individual revision subjects in section 9 of the RIR, but it should have been addressed in section 5. The potential number of affected entities would be those facilities in the RIR for Water Quality Standards, Tables 10-14. Water quality reviews can involve short or very long periods of time. Therefore, there is not sufficient amount of data to reasonably estimate the cost to the department. Staff has added information regarding the recalculation of effluent limits to section 5.

Comment #15: The cost to the agency for the development of an anti-degradation implementation procedure has not been addressed.

Response #15: The department has not assessed the effect of implementing the anti-degradation policy. Since the implementation procedure has not been developed, as of yet, it would be difficult to determine the extent of the implementation. Therefore, costs cannot be calculated at this time.

6. Comparison of the probable costs and benefits of the proposed rule to the probable cost and benefits of inaction, which included both economic and environmental costs and benefits.

Comment #16: The RIR inaccurately states that without schedules or effective dates in the effluent rule immediate action to upgrade treatment would be required upon the effective date of WQS revisions.

Response #16: Upon the effective date of the WQS, all standards become enforceable for the purposes of the Missouri Clean Water Law. The standard at 10 CSR 20-7.031(10) does allow up to three years from the date of issuance of the National Pollutant Discharge Elimination System (NPDES) or Missouri operating permit for compliance with new or revised permit limits. Though this action would occur, for the most part, at the time of permit renewal, the department does have the discretion to require immediate action. For example, if human health is threatened, treatment may be required as quickly as possible. The draft implementation schedule contained in the effluent regulations is to ensure consistency and a transparent approach.

Comment #17: The phrase “What is the price of good health?” should be stricken.

Response #17: The department agrees the above statement is subjective and has removed the language from the RIR. The extent of public health effects related to the current lack of treatment is unknown and can not be reasonably determined without better data.

Comment #18: The last sentence of the first paragraph implies that inaction will result in lowered health and diminished resources.

Response #18: Inaction would maintain the current level of public exposure to pollutants. Currently all waters of the state are protected by general criteria at 10 CSR 20-7.031(3). For one to establish the level of adequate protection using general criteria, one must discover the existing uses and water quality first. When comparing the differences in levels of protection between general and numeric criteria, numeric criteria offers the higher level of protection.

Comment #19: Information should be provided regarding the risk of waterborne diseases due to sewage relative to the risk of foodborne illnesses or zoonoses. Economic valuation of recreational resources exists.

Response #19: The current risk of contracting waterborne diseases from surface waters is unknown. Although the state does have a method for hospitals and doctors to report gastrointestinal illness due to activities in recreational waters, this process is rarely followed. Therefore, any calculations based on the available data would not be accurate. Additionally, many individuals would not seek treatment from a doctor or hospital unless their illness is severe. Bacteria data is limited, especially on waters not currently designated for whole body contact recreation. The risk assumed by the draft indicator bacteria is eight (8) illnesses per one thousand (1,000) recreators¹.

Comment #20: No supporting evidence was provided for the statement “The faster these standards are achieved, the sooner these benefits are realized.”

Response #20: No specific information or figures can be determined at this time regarding the potential increase in tourism or industry related to the rules. The statements in the RIR are based on general knowledge that clean water attracts people with businesses following. Logically, people swimming/wading in WBCR designated waters, will have less chance of exposure to water pathogens than if the water was not designated and protected.

7. Determination of whether there are less costly or less intrusive methods for achieving the proposed rule.

Comment #21: The RIR does not provide supporting information related to financial capability and timeframes for design, permitting, and construction.

Response #21: See Response #2.

¹ Please see the following documents for more details: (1) *Ambient Water Quality Criteria for Bacteria—1986*, EPA 440-5-84-002, <<http://www.epa.gov/waterscience/beaches/1986crit.pdf>> and (2) *Implementation Guidance for Ambient Water Quality Criteria for Bacteria—Draft*, EPA 823-B-02-003, <<http://www.epa.gov/ost/standards/bacteria/bacteria.pdf>>.

- 8. Description of any alternative method for achieving the purpose of the proposed rule that were seriously considered by the department and the reasons why they were rejected in favor of the proposed rule.**

Comment #22: Information related to the financial capability and timeframes for design, permitting, and construction of required improvements to POTWs should be included.

Response #22: See Response #2.

- 9. Analysis of both short-term and long-term consequences of the proposed rule.**

Comment #23: The RIR does not provide supporting information related to the expected water quality improvements.

Response #23: No specific evidence can be found at this time regarding the potential improvements in water quality. Currently there is not enough data to determine water quality improvement potential, particularly for all areas of the state. Staff is assuming that more strict standards would result in more protection of our resources and improvements in water quality.

- 10. Explanation of the risks to human health, public welfare or the environment addressed by the proposed rule.**

No comment was made by UAC.

- 11. Identification of the sources of scientific information used in evaluating the risk and a summary of such information.**

No comment was made by UAC.

- 12. Description and impact statement of any uncertainties and assumption made in conducting the analysis on the resulting risk estimate.**

No comment was made by UAC.

- 13. Description of any significant countervailing risks that may be caused by the proposed rule.**

Comment #24: The RIR does not consider countervailing risks associated with chlorine disinfection for CSOs or storm water that may be required to comply with the proposed rules.

Response #24: The proposed rule does not contain new or specific provisions to address CSOs except for possibly the high flow exemption. The department is not aware of any federal rules, policy or guidance on high flow exemptions. The department does not have sufficient data to calculate the potential scope for wet weather discharges to exceed the proposed water quality standards for bacteria and, therefore, is unable to assign a reasonably accurate cost for treating wet weather discharges. This rulemaking never intended to address CSOs. A workgroup has been organized to work on future revisions to the regulations.

Comment #25: The RIR does not adequately describe the risks to public safety posed by potential chlorine releases.

Response #25: The department cannot reasonably predict all situations of emergency associated with potential chlorine releases. A general comment on the dangers of chlorine was given to inform readers of the potential risk. A more detailed description of the risk would only be an unsubstantiated speculation.

14. Identification of alternative regulatory approaches that will produce comparable human health, public welfare, or environmental outcomes.

Comment #26: The RIR does not provide supporting information on the existing environmental and health risks and the time needed to upgrade treatment.

Response #26: See response #19 regarding health risks. Determination of existing environmental health for all waters of the state requires vast amounts of data. The department lacks sufficient data needed to determine risks and benefits of many of the draft standards, such as whole body contact recreation designations and metals. For example, if a water body has not been designated for whole body contact, there is likely no bacterial data for that water. The time needed to upgrade is based on an existing water quality standard [10 CSR 20-7.031(10)].

15. Information on how to provide comments on the RIR during the 60-day public comment period before the rule is provided to the Secretary of State.

Comment #27: Please, clarify the process that DNR will use for posting and responding to significant comments on the RIR.

Response #27: The department will carefully consider all comments received during the public comment period and revise the RIR appropriately. Comments will be formally responded to with a letter from the department. The revised RIR will be posted on the Internet along with all comments and responses. It will also be submitted to the Secretary of State as part of the rulemaking packet.

16. Information on how to request a copy of comments or the web information about their comments will be located.

Comment #28: See comment on Section 15 above.

Response #28: See response #27.

Ms. Susan M. Myers
Page Nine

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

Enclosure

JH:sbj

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission

Ms. Susan M. Myers
Urban Areas Coalition
2350 Market Street
St. Louis, MO 63103

RE: Comments regarding Regulatory Impact Report for 10 CSR 20-7.031, Water Quality Standards

Dear Ms. Myers:

Thank you for your letter dated December 16, 2004, addressed to Ms. Marlene Kirchner, secretary of the MO Clean Water Commission. After reviewing your comments, staff have the following responses. Your comments are summarized before each response.

Please note that the revision to the WQS is driven by the need to bring Missouri's water quality regulations in line with federal clean water requirements. Prior to the changes proposed, USEPA identified several WQS as disapproved or inconsistent with federal requirements. Inaction or failure to make the changes will result in USEPA promulgation. The department is making every effort to ensure that the state's rules are acceptable to EPA, so that federal promulgation is not necessary.

1. Does the rulemaking adopt rules from the US Environmental Protection Agency or rules from other applicable federal agencies without variance?

Comment #1: The department should clarify that federal rules adopted without variance do not require a RIR.

Response #1: While the clarification would be accurate with respect to how the statute reads, the department feels that the clarification might confuse the persons who read the RIR into thinking that adoption "without variance" of federal standards was intended. Some of the revisions within this rulemaking serve to make the Water Quality Standards (WQS) in 10 CSR 20-7.031 and Effluent Regulations (ER) in 10 CSR 20-7.015 consistent or functionally equivalent with the federal Clean Water Act. However, because exact wording from the federal rules was not adopted in the department's draft rule, several revisions are not considered to be written "without variance" from federal rules.

2. Report on peer-reviewed scientific data used to commence the rulemaking process.

Comment #2: Peer-reviewed scientific data does not appear to be presented for all proposed rules (e.g., catastrophic event).

Response #2: Peer reviewed data cannot be found to support the use of catastrophic storm events as the threshold for a high flow exemption. Use of this level of protection is based on best professional judgement (BPJ) and on what can be reasonably achieved through treatment technology. Many wastewater treatment facilities and other water pollution controls are designed to withstand a catastrophic storm event. These facilities would not be expected to treat water if a storm event occurs above that level.

3. Description of persons who will most likely be affected by the proposed rule, including persons that will bear the costs of the proposed rule and person that will benefit from the proposed rule.

Comment #3: Specific proponents should be stricken and replaced with a more comprehensive list of persons affected by this rule.

Response #3: Individual citizens and certain entities were not addressed due to their indirect association with the water quality standards and effluent regulations. The department cannot speculate as to the extent of indirect costs, such as sewer rate increases. The direct costs to WWTFs were already considered in the cost of rulemaking. The cost to control agriculture runoff associated with bacteria loading, if any, was not included in this RIR. Many agricultural activities are not required to have a permit, but are required, as with any citizen or entity, to comply with the Missouri clean water law and corresponding WQS. The department has many volunteer incentive-based programs to assist the agricultural community and other appropriate groups with protection of and compliance with WQS. Also, it is recognized that individuals and/or entities can, at the same time, be both proponents and opponents to parts of the rule. Because the statute does not require the identification of proponents and opponents of the draft rule, the statement that identifies any entity as either a proponent or opponent has been removed from the text of the RIR.

4. Description of the environmental and economic costs and benefits of the proposed rule.

Comment #4: The Environmental Benefits section does not quantify the benefits.

Response #4: By summarizing the scope of the proposed changes to the WQS, the department hoped to generally convey that the effects (costs and benefits) to water resources in Missouri would be widespread. Making a detailed or reasonable estimate of the total amount of environmental costs and benefits is unfeasible for the entire state, due to lack of water quality data on many of the waters within the state.

Comment #5: The Environmental Costs section contains statements that are not relative, are subjective, and are not supported by quantitative information. Chlorine costs are not addressed.

Response #5: The department is deleting the statements from Section 4 that read: "The environmental costs from inaction are substantial. These costs are briefly explained in Section 6 of this report." Section 4 has been rewritten to reference Section 13, which

addresses this issue. As Section 13 states, the department is unable to determine the number of instances where this risk may exist. Therefore, while chlorine use is known to be an environmental risk, the extent of that risk resulting from the proposed rule can not be reasonably calculated.

Comment #6: The Economic Costs section does not include sufficient detail.

Response #6: Unit rate assumptions can be found in the revised Water Quality Standards RIR, Appendix D. The financial and life cycle status of a wastewater treatment facility (WWTF) is not available to the department in the majority of cases. It could be assumed that the average life span of a facility is 20 years. The cost of dechlorination was calculated for facilities that use chlorine. As stated in the RIR, it was assumed that most mechanical wastewater treatment plants would use UV disinfection. Therefore, it was also assumed that such facilities would not need additional filtration since their effluent would be of high quality. The department has included the assumptions used for determining the costs for dechlorination and additional filtration in the section.

Comment #7: The RIR should list all individual POTWs and related information.

Response #7: It was deemed inappropriate to list the specific facilities used in the calculation of disinfection costs. The list of these facilities is available for review as part of the WQS file held by the Water Protection Program. The assumptions used in determining the cost of disinfection was included in paragraph five of section four. Individual facilities were not separately investigated to determine specific costs for upgrading their plant. The queried facilities were grouped according to their design flow and assumptions for those groups were used. As to the cost per facility, one can divide the total cost in each category by the number of facilities in that particular category. (For example, one hundred fourteen (114) facilities were categorized as public facilities with design flows less than 0.05 MGD and chosen for chlorination would have \$1,425,000 in installation costs. This averages about \$12,500 per facility in chlorination installation costs.)

Comment #8: In developing costs for disinfection, it is unclear what flows were used (e.g., design flow or peak flow).

Response #8: To make the cost estimations more manageable, the department categorized facilities into similar groups by design flow. Peak flows were calculated from the average flow using standard engineering factors. These calculations were used when determining the appropriate equipment needed for disinfection.

Comment #9: Costs for complying with the proposed rules for whole body contact recreation (WBCR) and bacteria criteria should also be estimated for wet weather discharges.

Response #9: The department does not have sufficient data to calculate the potential scope for wet weather discharges to exceed the proposed water quality standards for bacteria and, therefore, is unable to assign a reasonably accurate cost for treating wet weather discharges.

Comment #10: The cost of conducting Use Attainability Analyses (UAAs) should be included for all facilities that currently discharge to waters not designated for WBCR.

Response #10: The estimates provided for treatment assumed that all point source discharges of bacteria would receive disinfection. UAAs conducted on any of those receiving waters may result in an overall cost reduction if the UAA led to the removal of the WBCR use. The department chose to present the highest cost that can reasonably be expected as result of the proposed rule.

Comment #11: Costs for facilities that will have to test for both fecal coliform and *E. coli* should be included.

Response #11: Facilities will not be required to test for both fecal coliform and *E. coli*. The draft regulations state that either can be monitored for a period of three years. After that time, entities will be allowed to monitor only *E. coli*. The transitional phase was developed to allow entities and labs time to make the conversion to *E. coli*. Since *E. coli* requires a slightly different method of analysis, additional equipment may need to be acquired. The cost for conducting both analyses is not needed. The cost of analysis for fecal coliform and *E. coli* is essentially the same beyond the initial equipment.

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7. Determination of whether there are less costly or less intrusive methods for achieving the proposed rule.

No comment was made by UAC.

8. Description of any alternative method for achieving the purpose of the proposed rule that were seriously considered by the department and the reasons why they were rejected in favor of the proposed rule.

Comment #21: In the case of CSOs, the state has not deferred to the use of federal rules, policy, and guidance.

Response #21: The proposed rule does not contain new or specific provisions to address CSOs except for possibly the high flow exemption. The department is not aware of any

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federal rules, policy or guidance on high flow exemptions. This rulemaking never intended to address CSOs. A workgroup has been organized to work on future revisions to the regulations.

9. Analysis of both short-term and long-term consequences of the proposed rule.

Comment #22: This section provides little analysis of short-term and long-term consequences of the proposed rule, specifically implications of increased sewer rate.

Response #22: Sewer rate increases were not addressed due to their indirect association with the water quality standards. The department is unable to reasonably predict the extent of indirect costs, such as sewer rate increases, associated with the direct costs to treatment plants.

Comment #23: The RIR does not state the number of significant industrial users (SIUs) that may be affected by the rule changes.

Response #23: The department does not maintain a database of SIUs. Therefore, the department does not consider this information as readily available. Due to several factors stated in response #13, the calculation of costs associated with the metals criteria cannot be determined at this time, regardless of the number of SIUs. The facility numbers in Table 11 of the RIR are only direct dischargers with NPDES permit limits for metals.

10. Explanation of the risks to human health, public welfare or the environment addressed by the proposed rule.

Comment #24: This section provides no explanation or quantitative information, but refers to Section 4 and EPA documents.

Response #24: Staff felt that this information need not be repeated. Therefore, appropriate portions of the RIR and other available technical documents, which already address this point, were identified through reference.

11. Identification of the sources of scientific information used in evaluating the risk and a summary of such information.

No comment was made by the UAC.

12. Description and impact statement of any uncertainties and assumption made in conducting the analysis on the resulting risk estimate.

No comment was made by the UAC.

13. Description of any significant countervailing risks that may be caused by the proposed rule.

Comment #25: The RIR does not consider countervailing risks associated with chlorine disinfection for CSOs or storm water that may be required to comply with the proposed rules.

Response #25: See responses #9 and #21.

Comment #26: The RIR does not adequately describe the risks to public safety posed by potential chlorine releases.

Response #26: The department cannot reasonably predict all situations of emergency associated with potential chlorine releases. A general comment on the dangers of chlorine was given to inform readers of the potential risk. A more detailed description of the risk would only be an unsubstantiated speculation.

14. Identification of alternative regulatory approaches that will produce comparable human health, public welfare, or environmental outcomes.

Comment #27: A number of alternative approaches were discussed during stakeholder meetings that have not been addressed in this report.

Response #27: Staff regrets that two specific alternatives were not mentioned in this section. A phased approach to recreational uses designations along with a tiered approach for aquatic life designations were discussed. Staff will include the discussions of these alternatives in the section of the RIR.

15. Information on how to provide comments on the RIR during the 60-day public comment period before the rule is provided to the Secretary of State.

Comment #28: Please, clarify the process that DNR will use for posting and responding to significant comments on the RIR.

Response #28: The department will carefully consider all comments received during the public comment period and revise the RIR appropriately. Comments will be formally responded to with a letter from the department. The revised RIR will be posted on the Internet along with all comments and responses. It will also be submitted to the Secretary of State as part of the rulemaking packet.

16. Information on how to request a copy of comments or the web information about their comments will be located.

Comment #29: See comment on Section 15 above.

Response #29: See response #28.

Appendix A. Technical Documents and Data Used in Developing Proposed Rule

Comment #30: The raw data and associated analysis should be presented in the RIR.

Response #30: This data was not used to establish new criteria. It served only the purpose of establishing trends and for reference. The data came from a variety of locations. Hydrology data can be found on the U.S. Geologic Survey (USGS) web page at <<http://nwis.waterdata.usgs.gov/mo/nwis/discharge>>. Water quality data can be found on the USGS web page at <<http://www.umesc.usgs.gov/ltrmp.html>> and <<http://water.usgs.gov/nawqa/>>. Weather data can be found on the NOAA web page at <<http://www.epa.gov/waterscience/basins/metadata/wdm.htm>> and <<http://www.nws.noaa.gov/>>. U.S. monthly precipitation can found at <<http://www.ncdc.noaa.gov/oa/climate/online/coop-precip.html>>.

Ms. Susan M. Myers
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Appendices B and C. Minutes from Stakeholder Meetings in 2001 and 2003.

Comment #31: The stakeholder meeting minutes may provide beneficial information, but we are concerned they were never distributed to the attendees for review and comment.

Response #31: Although not reviewed by the participants, the minutes do reflect the department's view of the stakeholder discussions and provide readers an understanding of the information used by the department in developing the rule and the RIR. Participants bring different perspectives to the stakeholder discussions, and the department intends to represent the discussions accurately. The Department will make corrections as necessary in the future.

Again, thank you for reviewing and commenting on the Effluent Regulation's Regulatory Impact Report. Should you have any questions about these responses, please contact Mr. Phil Schroeder, Chief, Water Quality Monitoring and Assessment Section, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-6623.

Sincerely,

WATER PROTECTION PROGRAM

Jim Hull
Director

JH:sbj

Enclosure

c: Mr. Scott B. Totten, Director, WPSCD
Ms. Pam Bax, Deputy Director, WPSCD
MO Clean Water Commission